

Mr. Paul Dulik
Kenny Manta Industrial Services
414 N. Orleans, Suite 202
Chicago, Illinois 60410

Re: Exempt Construction of Emission Units in a TV Source
089-13632-00007

Dear Mr. Dulik:

The application from Kenny Marta Industrial Services received on December 18, 2000, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following operation located at U. S. Steel - Gary Works, 1 Broadway, Gary, Indiana is classified as exempt from air pollution permit requirements:

One (1) oil/scale recovery process consisting of:

- (a) One (1) horizontal decanter centrifuge identified as C-1, and with a maximum capacity of 10,976 lbs/hr.
- (b) One (1) vertical clarifying centrifuge identified as C-4, and with a maximum capacity of 3,937 lb/hr.
- (c) Two (2) vertical separator centrifuges identified as C-2 and C-3, and with a maximum capacity of 2,342 and 9,544 lb/hr, respectively.
- (d) Four (4) spiral heat exchangers, identified as H-1, H-2, H-3, and H-4 and with a maximum capacity of 10,976, 2,342, 9,544, and 3,937 lb/hr, respectively.
- (e) Two (2) 15,000 gallon horizontal tanks, identified as T-1 and T-2.
- (f) Six (6) 14,100 gallon vertical tanks, identified as T-3 through T-8.
- (g) Two (2) portable 4,000 gallon tanks, identified as T-9 and T-10.

Kenny Manta Industrial Services (KMIS) is an on-site contractor for U.S. Steel - Gary Works. KMIS will own and operate the equipment, but these facilities are considered part of U.S. Steel. Therefore, this exemption was evaluated considering the equipment as part of the U.S. Steel source and with respect to U.S. Steel's pending Title V permit.

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following:
 - (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
- (2) Pursuant to 326 IAC 8-9-1 (Volatile Organic Liquid Storage Vessels), the ten (10) VOL tanks are subject to the record keeping and reporting requirements of this rule. The requirements are as follows:
 - (a) The owner or operator of each vessel shall maintain records for the life of the vessel of the following information:
 - (1) The vessel identification number.
 - (2) The vessel dimensions.
 - (3) The vessel capacity.
 - (4) A description of the emission control equipment for each vessel.
 - (b) A report containing the information described in (a) shall be submitted to IDEM.

This existing source, U.S. Steel - Gary Works, has submitted their Part 70 application (T 089-7663-00175) on December 13, 1996. Although this permit is under KMIS's name, the equipment being reviewed under this permit is considered part of the U.S. Steel - Gary Works source, and therefore, shall be incorporated in the Part 70 application submitted by U.S. Steel.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Management (OAM) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

ERG/KH

cc: File - Lake County
U.S. EPA, Region V
Lake County Health Department
Air Compliance Section Inspector - Ramesh Tejuja
Northwest Regional Office
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner
Gary Department of Environmental Affairs

**Indiana Department of Environmental Management
Office of Air Quality and
Gary Department of Environmental Affairs**

**Technical Support Document (TSD) for
Exempted Units In a Title V Source**

Source Background and Description

Source Name: Kenny Manta Industrial Services
Source Location: 1 Broadway Avenue, Gary, Indiana 46402
County: Lake
SIC Code: 3312
Operation Permit No.: 089-13632-00007
Permit Reviewer: ERG/KH

The Office of Air Quality (OAQ) has reviewed an application from Kenny Manta Industrial Services (KMIS) relating to the construction and operation of an oil/scale recovery operation at U.S. Steel-Gary Works.

Source Definition

This equipment which is owned and operated by Kenny Manta, is considered to be part of the U.S. Steel - Gary Works source located at 1 Broadway, Gary, Indiana 46402, because IDEM has determined that U.S. Steel - Gary Works and KMIS are under the common control of U. S. Steel - Gary Works.

New Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

One (1) oil/scale recovery process consisting of:

- (a) One (1) horizontal decanter centrifuge identified as C-1, and with a maximum capacity of 10,976 lbs/hr.
- (b) One (1) vertical clarifying centrifuge identified as C-4, and with a maximum capacity of 3,937 lb/hr.
- (c) Two (2) vertical separator centrifuges identified as C-2 and C-3, and with a maximum capacity of 2,342 and 9,544 lb/hr, respectively.
- (d) Four (4) spiral heat exchangers, identified as H-1, H-2, H-3, and H-4 and with a maximum capacity of 10,976, 2,342, 9,544, and 3,937 lb/hr, respectively.
- (e) Two (2) 15,000 gallon horizontal tanks, identified as T-1 and T-2.
- (f) Six (6) 14,100 gallon vertical tanks, identified as T-3 through T-8.
- (g) Two (2) portable 4,000 gallon tanks, identified as T-9 and T-10.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
S-1	Tank #1 Hot Strip Mill Thickener Underflow	10	.33	Variable	160
S-2	Tank #2 Hot Strip Mill Thickener Underflow	10	.33	Variable	160
S-3	Tank #3 Water	25	.33	Variable	160
S-4	Tank #4 North Sheet Mill / Oil Skimmings	25	.33	Variable	160
S-5	Tank #5 Terminal Treatment/API Skimming Oil	25	.33	Variable	160
S-6	Tank #6 Miscellaneous Oil	25	.33	Variable	160
S-7	Tank #7 Processed Oil	25	.33	Variable	160
S-8	Tank #8 Processed Oil	25	.33	Variable	160
S-9	Tank #9 Portable TTP Oil Skimming	6	.33	Variable	160
S-10	Tank #10 Portable Scale Pit Skimmings	6	.33	Variable	160

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on December 18, 2000.

Emission Calculations

The calculations submitted by the applicant have been verified and found to be accurate and correct. These calculations are provided in Appendix A of this document (Appendix A, page 1) .

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount

of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	0
PM-10	0
SO ₂	0
VOC	0.09
CO	0
NO _x	0

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Tanks	0	0	0	0.027	0	0	0
Fugitive equipment leaks	0	0	0	0.066	0	0	0
Total Emissions	0	0	0	0.09	0	0	0
IDEM Exemption Thresholds	5	5	10	10	25	10	2.5

The emissions of VOC, the only pollutant to be emitted from the applicable emission units, are equal to 0.09 tons per year. This emissions total is significantly smaller than the exemption threshold of 10 tons per year (for sources that do not require the use of an air pollution control equipment to comply with the provisions of 326 IAC 8), and therefore, these emission units can be considered exempt.

County Attainment Status

The source is located in Lake County.

Pollutant	Status
PM-10	moderate
SO ₂	primary
NO ₂	attainment
Ozone	severe
CO	maintenance
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as nonattainment for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

- (b) Lake County has been classified as nonattainment for SO₂, ozone, and CO. Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (c) This source is not located in the nonattainment portion of Lake County for CO.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	238
PM10	1,683
SO ₂	6,147
VOC	4,618
CO	1,023
NO _x	4,334

- (a) This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the 28 listed source categories.
- (b) These emissions are based upon construction 089-12137-00121.

Proposed Modification

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO ₂ (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO _x (ton/yr)
Proposed Modification	0	0	0	0.03	0	0
PSD or Offset Significant Level	25	15	40	40	100	40

- (a) This modification to an existing major stationary source is not major because the emissions increase is less than the Emission Offset significant levels. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, U.S. Steel - Gary Works, submitted their Part 70 (T-089-7663-00175) application on December 13, 1996. Although this permit is under KMIS's name, the equipment being reviewed under this permit is considered part of the U.S. Steel - Gary Works source and therefore, shall be incorporated in the Part 70 application submitted by U.S. Steel.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source 40 CFR 60, Subpart Ka for Volatile Organic Storage

Vessels, does not apply to Tanks T-1 through T-10 because their capacities are below 75 cubic meters.

- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 8-9-1 (Volatile Organic Liquid Storage Vessels)

Pursuant to 326 IAC 8-9-1 (Volatile Organic Liquid Storage Vessels), the ten (10) VOL tanks are subject to the record keeping and reporting requirements of this rule. The requirements are as follows:

- (a) The owner or operator of each vessel shall maintain records for the life of the vessel of the following information:
 - (1) The vessel identification number.
 - (2) The vessel dimensions.
 - (3) The vessel capacity.
 - (4) A description of the emission control equipment for each vessel.
- (b) A report containing the information described in (a) shall be submitted to IDEM.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Quality (OAQ) Construction Permit Application Form Y.

None of the listed air toxics will be emitted from this facility.

Conclusion

The construction and operation of this oil/scale recovery process shall be subject to the conditions of the attached proposed New Source Construction and Minor Source Operating Permit 089-13632-00007.

Kenny Manta Oil/Scale Recovery Process US Steel Gary IN

Total Organic equipment leak emission estimate

Equipment	Count	Factor*	lbs/yr
Valves	60	0.000098	113
Pumps	10	0.000024	5
Flange/fittings	240	0.0000029	13
Total Annual			131 lbs/year

*kg/hr/source: EPA-453/R-95-017, Protocol for Equipment Leak Emission Estimate
50% Oil/water mix, Pg 2-15

Total maximum organic emissions

T-1 Hot Strip Mill Thickener Underflow	11.2	Use EPA Tanks 4.0
T-2 Hot Strip Mill Thickener Underflow	11.2	See detail sheets
T-3 Water	0.05	
T-4 N.Sheet Mill/Oil Skimming	4.7	
T-5 Terminal Treatment/API Skimming Oil	4.7	
T-6 Misc oil	4.7	
T-7 Processed Oil	4.7	
T-8 Processed Oil	4.7	
T-9 Portable, TTP Oil Skimming	3.5	
T-10 Portable, Scale Pit Skimming	3.5	
Fugitive equipment leaks	131	
Total	184 lbs/yr	Max

The maximum annual organic emissions will not exceed 184 lbs/yr.

Jim Karas P.E.
12/12/2000